



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,878	04/04/2001	Mihai Rasidescu	P 276825 RP-00208-US4	3371

909 7590 01/16/2003

PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER

CULBRETH, ERIC D

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,878

Applicant(s)

RASIDESCU ET AL.

Examiner

Eric D Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-128 is/are pending in the application.
- 4a) Of the above claim(s) 18,20,41,43,66,69,80-82,93,97,124 and 128 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17,19,21-40,42,44-65,67,68,70-79,83-92,94-96,98-123 and 125-127 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4&5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Claims 18, 20, 41, 43, 66, 69, 80-82, 93, 97, 124 and 128 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8 (contrary to applicant's remarks, claim 40 reads on the elected species and claim 41 reads on another species).

Drawings

2. The drawings are objected to because of the following informalities. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

- a. Reference numeral 866 (page 4, line 5) refers to two different parts of the invention (see Figure 2).
- b. Reference numeral 868 occurs twice in Figure 2.
- c. Reference numeral 900 (page 4, line 3 from the end) is not on the drawings.
- d. Paragraph [0040] on page 11 is not accurate (Figures 3-4 are not views of the frame (i.e. not the entire frame)).
- e. Similarly, paragraph [0047] on page 12 is not accurate (Figures 11-12 are not view of the frame).

Art Unit: 3616

f. In paragraph [0050] on page 12 and paragraph [0059] on page 15 “A-A” and “B-B” should be “18A-G – 18A-G”, as section lines should be named for the figures they represent.

Note also page 27, paragraph [0088].

g. Reference numeral 112''' (page 17, paragraph [0064] is not on the drawings.

h. Reference numeral 130 (page 20, paragraphs [0073] and [0074]) is not on the drawings.

i. On page 31, paragraphs [0097] and [0100] reference numeral 14' is not on the drawings.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of claims 46-47 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The following changes were made by informal examiner's amendment:

Art Unit: 3616

- a. On the last line of page 5 a period was added after “vehicle”.
- b. On page 21, line 9 “, however” was changed to “; however”.
- c. On page 30, line 5 “, however” was changed to “; however”.
- d. On page 31, line 16 “302.” was changed to “302,”.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 12, 22, 45-49, 67 and 70, 101-103 and 111-118 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is identical to claim 11, and hence fails to further limit the invention.

Claim 22 should end in a period.

In claims 45-47 “type” is indefinite, suggesting structure but not defining it. Also in claims 46-47 it is not clear what is meant by “semi-independent” and “non-independent” (the latter is a negative limitation). Note also claims 101-103.

In claim 67 there is no antecedent basis for “said first and second suspension mounting points”.

In claim 70 there is no antecedent basis for first and second sectional dimensions.

In claims 111 and 116 and 120 “in lieu of...” is a negative limitation (reciting members not there).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2, 4-6, 9, 17, 19, 21, 50, 53-54, 67, and 107-110 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Sheffer.

Sheffer discloses upper platform or frame member 18, lower frame member or floor 25, first cross member 24 and second cross member 22 extending between the frame members to form closed perimeter with an engine receiving space, suspension mounting points associated with at least one of the frame and cross members (where brackets 90 and 132 are mounted), and at least one of members 18, 25 along the frame centerline from one mounting point to the other. At least upper member 18 consists essentially of a single beam (claims 1-2, 21 and 50). The suspension mounting points are on upper platform 18, and floor 25 is rectangular in cross section (claims 4-6). Members 18 and 25 are vertically aligned (claim 9), and rear suspension mounting structure 132 is rigidly mounted to one of the suspension mounting points (claim 19). Noting claim 17, frame member 25 is bent toward frame member 18 to form cross member 24. Regarding claims 53-54, Sheffer teaches first and second suspension mounting points at 90 and 132 with frame member 18 extending between them. Regarding claim 67, as indefinitely recited, swing arm 106 is supported by rigid structure 102 mounted to one of (additional) first and second suspension mounting points (as there is no antecedent basis for these) under brackets 102, 28

Art Unit: 3616

adjacent or near cross member 25 and second frame member 25 within the central opening for the engine. Regarding claims 107-110, the wheels at 112 and 57 are outboard wheel assemblies (i.e., each is an assembly of tires and spokes outboard of the frame housing the engine). The structural features of claims 108-110 are also addressed above. The limitations throughout these claims regarding an "ATV" are functional statements of intended use, as all these limitations are mentioned in the preamble of the claims, and there is no structure recited in the bodies of the claims specific to, i.e., four wheel or three wheel ATV vehicles (i.e., as functionally recited Sheffer's motorcycle is an all terrain vehicle as much as a three or four wheel vehicle is one is slow and careful).

10. Claims 50-52, 55-58, 61-63, 70, 111-123 and 125-127 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Itoh et al.

The recitations throughout the claims referring to an ATV are functional statements of intended use as described above.

Itoh et al's Figures 11b-13 clearly anticipate the following claims: 50-52, 55-58, 63, 70, 112-123, and 125-127.

Regarding claims 61-62, Itoh et al discloses laterally extending members 22 on the upper frame which connect the seat, and footrests at the lower rear corner of the integral frame in Figure 12 that would extend outwardly from sides of the lower frame member with upwardly facing rider support surfaces.

Art Unit: 3616

Regarding claim 111, Itoh et al teaches suspension systems 31, 33 coupled with each of the wheel assemblies (front fork 31 is illustrated as a shock absorber, with the upper tube sliding into the lower tube).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1, 3, 7-8, 10-12, 16, and 22 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al in view of Sheffer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Itoh et al to include suspension mounting points associated with at least one

Art Unit: 3616

of Itoh et al's first and second frame member as taught by Sheffer's suspension mounting points at 90 and 132 in order to conventionally support the vehicle in a manner that cushions bumps using alternative known equivalent mounting locations in the art (claim 3). The other features of claims 3 and 7-8 and claim 1 as well as claims 10-12 and 22 are clearly taught by Itoh et al.

Regarding claim 16, Itoh et al teaches connecting members 22 extending outwardly from and fixedly mounted to the upper frame member.

14. Claims 13-15, 23-25, 28-29, 32, 36-38, 42, 44, 46-47, 71, 74-76, 90-91, 94, 100, 102-103 and 105 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubayashi et al in view of Sheffer.

Matsubayashi et al teaches cross members 12b, 12f, second frame member 12d, 12d' and longitudinally centered beam 11 forming an engine receiving space, but does not teach suspension mounting points associated with one of the frame members. Portion 12d is bent upwardly from horizontal (Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsubayashi et al to include suspension mounting points such as taught by Sheffer at 90 and 132 in order to conventionally mount a suspension to the vehicle to ease shocks and travel over bumps (claims 13 and 36). The angle of the forward portion to the horizontal (claims 14-15 and 37-38) is an obvious matter of design choice, as the specification gives no particular purpose or stated reason for the specific angles recited, and the invention would appear to work just as well with the angle taught by Matsubayashi et al. Matsubayashi et al teaches a four wheel vehicle or ATV (claim 23), as well as a singular tubular beam 11 (claims 24-25). Regarding claims 28-29 and 32, in the

Art Unit: 3616

combination Sheffer's mounting points for brackets 90, 132 are on the upper frame member, and the cross section of each of Sheffer's frame members has a greater width than height. Sheffer's upper and lower frame members are vertically aligned in the combination. In the combination Sheffer's rear bracket 132 is fixedly mounted at a suspension mounting point (claim 42), and (claims 46-47) in the combination Sheffer's suspension is semi or non independent as best understood. Regarding claims 71 and 90-91 in the combination Sheffer teaches the upper and lower frame members being beams and pivot structures at 102, 28 in the central opening. Trailing arms 106 of Sheffer in the combination would carry Matsubayashi et al's wheel assemblies. Regarding claims 100, 102-103, and 105 Sheffer teaches forward and rearward suspension assemblies that are semi- or non-independent as best understood, and brackets 102 and 28 in the combination are connected to exterior surfaces of Sheffer's lower frame member 25. Regarding claims 74-76, Sheffer teaches mounting points at brackets 90, 132 on a surface at the end of the upper frame member and the upper and lower frame members having rectangular profiles. Sheffer teaches brackets 102 within the central opening mounting swing arms (claim 94) in the combination.

15. Claims 26-27, 30-31, 33-35, and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubayashi et al in view of Sheffer as applied to claim 23 above, and further in view of Itoh et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsubayashi et al and Sheffer to include the upper and lower frame members and cross members consisting of single beams as taught by Itoh et al in order to

Art Unit: 3616

provide high rigidity (Itoh et al, column 1, lines 35-40). In the combination Itoh et al teaches oval/elliptical cross sections as well as identical cross sections for the upper, lower and cross frame members in Figures 11b-13 (claims 26-27, 30-31 and 33-35). Also in the combination (claims 39-40), Itoh et al teaches laterally extending seat connecting members 22 and Sheffer teaches lower frame member 25 bent toward upper frame member 18 at an end to form cross member 24.

16. Claims 45, 48-49, 92, 95, 98, 101 and 104 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubayashi et al in view of Sheffer as applied to claims 44, 71 and 100 above, and further in view of Bernardi.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsubayashi et al and Sheffer to include a fully independent type suspension as best understood as taught by Bernardi in order to better cushion shocks to the vehicle (claims 45 and 101). Sheffer in the combination teaches the swing arm suspensions connected to the exterior of the lower frame member at 102 and 28 (claims 48-49 and 95 and 104), and Bernardi in the combination teaches front a-arms that would be attached to the lower frame by mounts (claims 92 and 98).

17. Claims 59-60 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al in view of ~~Itoh et al in view of~~ Tsukahara et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Itoh et al to include a forward portion of the second frame member bent

Art Unit: 3616

upwardly in view of Tsukahara et al's section 10 bent slightly upward in order to accommodate a steering post using alternative equivalent structure in the art. The angle of bending (17 or 8 degrees) is an obvious matter of design choice as discussed above (claims 59-60), and in the combination a forward portion of Tsukahara et al's frame at U, U and 9 bends downwardly to connect and abut the lower frame member at 10 and form a front cross member.

18. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al in view of Patin.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Itoh et al to include a second support structure rearward of the support module in view of Patin, who teaches two vertical posts supporting the upper frame member for the seat, in order to support the seat with a second support at an alternative known equivalent location to Itoh et al's second support 64 (i.e., to have the second support contact the lower frame member instead of the rear cross member).

19. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheffer in view of Hara.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sheffer to include brackets that mount both the swing arm and engine in view of Hara's brackets 25-1, 25-2 which mount swing arms 13 at holes 27 and the engine at 25a in order to minimize parts.

Art Unit: 3616

20. Claims 71-73, 77-79, 83-85, 99, and 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubayashi et al in view of Itoh et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsubayashi et al to include suspensions coupled to each of the wheel assemblies as taught by Itoh et al in order to conventionally cushion the vehicle. In the combination Itoh et al teaches a single tubular beam forming the frame members and cross members to improve rigidity (claims 71-73), and Matsubayashi et al teaches an engine in the central connected to adjacent frame members (claim 77). The features of claims 78-79 and 83-85 and 99 have been addressed in previous rejections. Regarding claim 106 Matsubayashi et al's steering column receiver 40 extends above the upper frame member and connects to the front wheels.

21. Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukahara et al in view of Itoh et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tsukahara et al's frame with downward bending forward portions U, U, 9 to include a single beam and suspensions for each wheel as taught by Itoh et al in order to rigidify the frame and conventionally cushion shocks.

22. Claims 87-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubayashi et al in view of Sheffer as applied to claim 71 above, and further in view of Patin.

Art Unit: 3616

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsubayashi et al and Sheffer to include a second support behind the rear cross member as taught by Patin in order to better support the seat using an alternative attachment location to Itoh et al's member 64 attached to the rear cross member. Regarding claims 88-89, in the combination Patin teaches a differential in frame 8 that would be attached to the frame or support module in the combination and operative coupled to the engine by a driveshaft such as Sheffer's shaft 29. Sheffer teaches an engine attached to a rear drive (the differential in the combination) through a horizontally extending opening in the rear cross member 22 inasmuch as applicant's opening (i.e., the opening would have a horizontal dimension to it).

23. Claim 96 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubayashi et al in view of Sheffer and Hara.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsubayashi et al and Sheffer above to include engine mounting portions on the swing arm mounting structure as taught by Hara in order to minimize parts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

Art Unit: 3616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703/746-3508 for regular communications and 703/308-2571 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Eric D Culbreth
Primary Examiner
Art Unit 3616

Eric Culbreth
1/13/03

ec
January 13, 2003